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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/849,610	05/20/2004	Amos P. Waterland	AUS920040101US1	6813
43307	7590	01/17/2008		
IBM CORP (AP) C/O AMY PATTILLO P. O. BOX 161327 AUSTIN, TX 78716			EXAMINER TABOR, AMARE F	
			ART UNIT 2139	PAPER NUMBER
			MAIL DATE 01/17/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/849,610

Applicant(s)

WATERLAND, AMOS P.

Examiner

Amare Tabor

Art Unit

2139

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. This correspondence is in response to amendment file on November 06, 2007.
2. Claims 1, 5, 14 and 19-25 are amended; Claims 2-4, 7-13 and 15-18 are original.
3. Claims 1-25 are pending.

### *Response to Arguments*

4. Applicant's arguments, see REMARKS, filed on 11/06/2007, with respect to the rejection(s) of claim(s) 1-25 under 35 U.S.C. 101 for failing to have a concrete and tangible result have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, Applicant's arguments with respect to the rejection(s) of claims 1-25 under 35 U.S.C. 101 and 35 U.S.C. 103(a) are moot in view of the new ground(s) of rejection.

### *Claim Objections*

5. Claim 11 is objected to because of the following informalities: the conjunction "; and" placed at the end of the Claim should be deleted.

### *Claim Rejections - 35 USC § 101*

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 19 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 19 is directed to a computer-readable medium for carrying one or more sequence of instructions. The Examiner respectfully asserts that the claimed subject matter does not fall with the statutory class listed in 35 U.S.C. 101. The disclosure of the invention recites transmission media, such as: acoustic or light waves, data signals, carrier wave, electromagnetic or optical signals and digital data streams (see paragraphs [0030] to [0032] in the specification). A transmission media does not fall within one of the four statutory classes of 101. Therefore, Claim 19 and the respective dependent Claims 20-25 are rejected as being directed to non-statutory subject matter.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over “Baker” (US 5,428,349) in view of “Hoover” (US 6,209,102 B1).**

*As per Claim 1*, Baker teaches,

A computer-implemented method for secure password entry (see *Fig. 2-4; and abstract*), comprising: displaying a password prompt comprising a changing stream of random characters (see 8 in *Fig. 2 & 3; where a stream of random characters is displayed*), wherein a particular character within said changing stream of random characters is displayed at a visibly detectable higher frequency (see *Steps 22 & 23 in Fig. 4; where array of alpha-numeric characters are displayed in a visibly detectable frequency*).

Baker fails to teach explicitly receiving input to increment or decrement said particular character to reach a password character of a password.

However, in the same filed of endeavor, Hoover teaches receiving input to increment or decrement said particular character to reach a password character of a password (see *Fig. 1 & 2; and for example, col. 2, line 36-63*).

It would have been of obvious to a person having ordinary skill in the art at the time of Applicant's invention to combine the teachings of Hoover and Baker because both inventions are directed to method of password entry system. One having ordinary skill in the art would be motivated to incorporate the input increment and decrement feature of Hoover into the password entry method of Baker in order to prevent an attacker from downloading keystrokes or character positions when an authorized user enters password to gain an access to a secured system (see of Background Hoover).

*As per Claim 10*, Baker teaches,

A system for secure password entry (see *abstract*), comprising: a data processing system for controlling a display interface (see *Fig. 1-3 and 5-6*); said data processing system further comprising: means for displaying a password prompt (see *I/O DEVICE in Fig. 1-3 and I/O DEVICE 41 and 47 in Fig. 5-6*) comprising a changing stream of random characters within said display interface (see *changing random characters displayed in 8 of Fig. 2-3*), wherein a particular character within said changing stream of random characters is displayed at a visibly detectable higher frequency (see *Fig. 4; where array of alpha-numeric characters are displayed in a visibly detectable frequency*).

Baker fails to teach explicitly a means for receiving input at said data processing system to increment or decrement said particular character to reach a password character of a password.

However, Hoover teaches a means for receiving input at said data processing system to increment or decrement said particular character to reach a password character of a password (see *Fig. 1 & 2*; and for example, col. 2, line 36-63).

[The same reason to combine the two arts and same motivation to incorporate the arts applied to Claim 1 above are applied to this claim]

*As per Claim 19*, Baker teaches,

A computer program product for secure password entry, residing on a computer readable medium comprising instructions which when executed on a computer system cause the computer system to (see *Fig. 1-6; and abstract*): display a password prompt comprising a changing stream of random characters (see *8 in Fig. 2 & 3; where a stream of random characters is displayed*), wherein a particular character within said changing stream of random characters is displayed at a visibly detectable higher frequency (see *Steps 22 & 23 in Fig. 4; where array of alpha-numeric characters are displayed in a visibly detectable frequency*).

Baker fails to teach explicitly receive input to increment or decrement said particular character to reach a password character of a password.

However, Hoover teaches receiving input to increment or decrement said particular character to reach a password character of a password (see *Fig. 1 & 2*; and for example, col. 2, line 36-63).

[The same reason to combine the two arts and same motivation to incorporate the arts applied to Claim 1 above are applied to this claim]

***As per Claims 2-3, 11-12 and 20-21***, Baker teaches,

displaying a plurality of character positions, wherein a stream of random characters is displayed in each of said plurality of character positions (see *Fig. 2-3; where plurality of character positions of positions are displayed*; and for example, col.2, line 57 to col.3, line 12), wherein a particular position from among said plurality of character positions provides said password prompt (see *Step 24 of Fig. 4; where user selects a particular position*; and for example, col.3, lines 12-44); and adjusting a number of said plurality of character positions (see *Step 23; where the N and/or M in ROW/COLUMN can be adjusted*; and for example, col.3, line 57 to col.4, line 28).

***As per Claim 5, 14 and 23***, Baker teaches,

responsive to receiving input of a character selection input indicating that said particular character, selecting said particular character as said password character from among a plurality of separately selectable password characters of said password (see *Step 24; where user selects a password character from the matrix array*); and

responsive to receiving input of a password completion character indicating that said password is complete, securely passing each separately selected password character of said password to a requesting software layer (see *Steps 27-31; where last element of the password is entered and access is either permitted or denied*).

***As per Claims 6-7 and 15-16***, Baker teaches,

responsive to receiving a request for a password from a software layer within a data processing system, invoking a password entry controller (see *MICROPROCESSOR CONTROLLER or PASSWORD ALGORITHM in Fig. 1, 5 and 6*) from within said data processing system, wherein said password entry controller controls said displaying said password prompt (see for example, col.2, line 44 to col. 3, line 8; and col.4, lines 30-56); and

responsive to receiving, at a client system (see *REMOTE TERMINAL in Fig. 5*), a request for a password entry from a server system (see *MAIN COMPUTER 45 in Fig. 5*) from which said client system is attempting to access a resource, invoking a password entry controller from within said data processing system, wherein said password entry controller controls said displaying said password prompt (see for example, col.4, lines 30-44).

Baker fails to teach said receiving input to increment or decrement said particular character. However, Hoover teaches a receiving input to increment or decrement said particular character (see *Fig. 1* & 2; and for example, col. 2, line 36-63).

[The same reason to combine the two arts and same motivation to incorporate the arts applied to Claim 1 above are applied to this claim]

***As per Claims 8-9, 17-18 and 24-25***, Baker teaches, generating and displaying said stream of random characters, wherein said particular character is randomly selected (see *abstract and Fig. 2-3 and Step 23; where array of random characters are displayed*; and for example, col.1, line 55 to col.2, line 10).

Baker fails to teach explicitly adjusting a frequency percentage at which said particular character is displayed. However, Baker teaches displaying randomized alpha-numeric matrix array of characters at constant frequency (see *abstract and Fig. 2-3 and Step 23*).

It would have been of obvious to a person having ordinary skill in the art at the time of Applicant's invention to modify the system of Baker to display characters in an adjusted frequency percentage in order to enhance the password entry display unit, which would further discourage and confuse an attacker while eavesdropping.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (See PTO-892).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amare Tabor whose telephone number is (571) 270-3155. The examiner can normally be reached on Mon-Fri 7:30a.m. to 5:00p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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